LBRY PLN

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About This Document

Using the most literal of definitions, this document is a business plan. Formally, if:

> *A:* LBRY is a business that provides access to information
> *B:* This document outlines our vision, mission, strategy, team, status, and objectives

Then,

> $A + B \rightarrow$ this is a business plan

Under a more conventional parlance, this document is not a business plan. It does not adhere to all standard conventions. It is simply an attempt to explain what we're doing in a way that's frank, clear, and just a smidgen persuasive.

Vision

Every fact at every fingertip.

A consequence of technology evolving faster than cultural norms is that as innovation happens, existing generations attempt to adapt new technology to existing norms, while new generations revise the older generations' norms based on the technology being status quo.

> **"KODAK FIENDS" AT NEWPORT.**
>
> **Protests Against Their Practices About the Cottage Colony.**
>
> *Special to The New York Times.*
>
> NEWPORT, Aug. 17.—If the laws of this State can reach the "kodak fiends," some of the married men of the cottage colony will take the cases into the courts, and action will be brought against the aforesaid

When camera technology became available to the masses, there was a serious debate over taking pictures in public.

Where do we make this mistake today? One area is in the systems we use to handle the distribution of knowledge, art, culture, and information. Accustomed to a world in which an instance of knowledge or media was strongly coupled to a particular medium, we've built digital systems under the same assumptions.

Digital data is infinitely easy to reproduce, store, and copy, yet we attempt to regulate and provision it in ways that feel more like a physical good. Corporations compete over who can keep the most data locked away.

LBRY is an attempt to upend that dynamic. It says:

- Let's build a system that encourages shared participation rather than mutual exclusion.
- Let's make that system as easy, cheap, and secure as possible.
- Let's tie our own hands in the design of our system so that the system is trustworthy and transparent to its users. Leave the creators and users in charge, not us.
- Let's architecture the system and incentive structure that encourages rights holder participation, payment, and attribution rather than disorder.

LBRY is a system of digital distribution for the norms of the next generation.

Mission

Create a market for accessing and publishing information[1] that is global[2], decentralized[3], robust[4], optimal[5] and complete[6].

[1] In the information theory sense, i.e. any data. LBRY facilitates distribution of all data, whether it be a video or a spreadsheet. If the number 0111011110...11101 displays the film "It's a Wonderful Life" when input to VLC, this is a fact in the same way that a foot equals twelve inches.

[2] Accessible anywhere in the world on any internet-connected device.

[3] Not controllable by any one person, party or authority.

[4] Resistant to censorship or attempts to control; impervious to attacks or disruptions.

[5] In the Pareto sense with regards to the production and distribution of information (i.e. digital information is both *created* and *distributed* in a way that could not be any more efficient from the perspectives of information producers and consumers).

[6] The most complete collection of world's books, films, art, games, etc. should be available via LBRY.

Opportunity

LBRY aims to revolutionize the way that *all* packaged or streamed data is consumed (i.e. data that is not dynamically generated). But this is rather abstract, and stories are more convincing. So let's look at one of the largest opportunities: video information.

Annual internet video traffic is approximately 500 exabytes (500,000,000,000 GB). Every second, over 10,000 hours of video are streamed. The technical term for the quantity of videos people watch every year is a *million jillion.* I probably don't need to convince you of this.

Here's what I may need to convince you: that most video distribution is done through fundamentally flawed systems.

The ineluctable failure of existing systems is their centralized, top-down design. Taking direct control from creators and consumers has the following consequences:

1. **Increases costs to consumers**
   a. Providers must cover significant infrastructure costs.
   b. Providers must in parallel create complex ways for accessing something fundamentally simple (a number).
   c. Providers bear significant compliance costs.
2. **Degrades consumer experience**
   a. Providers must negotiate with many different creators, no single network.
   b. Consumers must select between many incomplete providers.
3. **Degrades publisher (creator) experience**
   a. Providers frequently demand control of content.
   b. Publishers lose profit to providers.

Similar issues of economics and experience exist for consumers and producers of information of all kinds (e.g. news, facts), not just videos.

LBRY solves these problems and throws in some other sweet innovations just for funsies.

We believe the value of resolving these problems to be worth rather absurd sums of money. More details are available under Economics.

The LBRY Network

LBRY is a protocol providing a fully decentralized market for publishing or accessing any piece of information. In a high-level way, it can be thought of as a combination of decentralized file publishing (e.g. BitTorrent) and a cryptocurrency (e.g. Bitcoin).

Parties

In LBRY world, there are four parties with differing roles and incentives:

1. **Hosts**. Hosts provide bandwidth and disk space to the LBRY network. They earn cryptocurrency in exchange.
2. **Miners**. Miners maintain the state of cryptocurrency balances as well as informational metadata (e.g. a full name or description). They contribute hashing power and some bandwidth in exchange for cryptocurrency.
3. **Publishers**. Publishers push information to the LBRY network, which is stored by hosts in an encrypted form. They earn cryptocurrency for providing content.
4. **Patrons**. Patrons consume information, paying cryptocurrency to both hosts and publishers.

Example

1. Ernest, a *publisher*, wants to release his comedy-horror film, "Ernie Runs For President".
2. Ernest reserves `lbry://ernieruns`, a name pointing to his content. He can also provide metadata, such as a description or photo. *Miners* keep track of this in the blockchain.
3. The film is encrypted and sliced into many pieces. These pieces are distributed to *hosts*.
4. Hillary, a *patron*, wants to watch the movie. Her LBRY client seamlessly streams the film by collecting the pieces from the hosts and reassembling them.
5. Hillary pays Ernest for the decryption key, allowing her to watch the film.

Key Innovations

There are several key innovations that will allow LBRY to disrupt both existing content networks (like Netflix) and existing decentralized informational access systems (like BitTorrent):

1. **Fully marketized information.** Because LBRY is both completely decentralized and fully marketized, it will be impossible for anyone to charge any price for information other than the market-clearing price. It will also create strong incentive for content to remain available that might disappear in a network like BitTorrent.

2. **Monetization of unused bandwidth and disk space.** A tremendous amount of bandwidth and disk space goes unused on computers everywhere. LBRY allows hosts to profit for contributing these resources to the network.

3. **Protocol, not proprietary.** Because LBRY is a *method* of doing things, it is easily extended and built upon by others. This also reduces our liability and compliance costs for illicit usage.

4. **Metadata in blockchain**. In other decentralized information systems, metadata storage can be risky or expensive. In LBRY, this metadata is required to mine the cryptocurrency.

5. **Improved privacy**. Hosts only store tiny portions of encrypted files, meaning they have no knowledge or way of discovering what information they provide.

6. **Assurance contracts**. Publishers can promise a decryption key for a piece of content only once a certain amount has been paid. Alex G. tells me you're supposed to label this a "Kickstarter for information" because the phrase "assurance contract" is scary.

7. **Memorable names**. LBRY allows you to access things at human friendly, logical resource indicators like `lbry://itsawonderfullife`. It also supports versioning.

Business Model

LBRY is at the forefront of what Union Square Ventures dubbed "fat protocols". As a protocol, LBRY is *not* a specific service, application, or program. There is nothing proprietary about it. Once LBRY is released, our abilities to control it will be no different than our users. Any proof-of-concept applications we create will be open-sourced.

However, unlike protocols from the earlier days of the internet, LBRY captures a significant portion of the value-add, rather than ceding it to the application layer. Each percentage of the currency can be thought of as having a value proportional to the sum of all information transacted through the network.

Given this situation, the most reasonable path to profit is to reserve a portion of the cryptocurrency. Early adopters of LBRY and LBRY itself deserve more compensation to compensate for their commensurate risk. Therefore, we believe the following is sensible:

- 20% to incentive adoption (extra early rewards for content creators and hosts)
- 10% for organizations, charities, or other entities aligned with LBRY objectives
- 10% for us (for operational costs / profit)
- Remainder mined

Additionally, as the creators of the protocol, we are in a prime position to capture revenue via the auxiliary services users of the protocol will desire. We believe we can capture recurring and ongoing revenue via the following channels:

- **Settlement and Financial Services.** While LBRY credits are required as payment rails, most users will desire USD or another currency specific to their location. We are in a prime position to provide these services and capture recurring revenue.

- **Professional and Consulting Services.** No one will understand how LBRY works better than us and no one will be better positioned to help existing or new companies make the most out of LBRY.

- **Advertisement.** While the protocol itself does not specifically handle advertisement, many videos will be priced at just a few cents to access. LBRY can pair advisters with viewers to cover this cost, similar to a more traditional video streaming model like YouTube.

Model and Projections

If LBRY replaces existing content distribution systems to any measurable degree, this represents generous value.

Before sharing our model, we must note here that we are generally skeptical of modeling, especially of this type. We prefer the *prima facie* argument that if any significant portion of the $2 trillion media market happens through the LBRY network that the credits will hold significant value.

However, for the model-lovers out there, we've made this:

https://docs.google.com/spreadsheets/d/1yxntcrQQabd8SK3qbxZlvV6EzbKsKh7qQh3W1dR1Z3c/edit#gid=43543292

Exit

LBRY may not be a traditional business, but this doesn't mean its exit can't be. While LBRY generates value in a somewhat oblique ways, recognizing that value is straightforward. LBRY exits in one of two ways:

1. **Liquidation**
   Even a modest capture of the market represents tremendous value. Since LBRY's most significant asset will be its credits, it could simply liquify these credits at a return of 10-10,000x on any investment.

2. **Sale**
   Beyond credits, LBRY will have value in brand, reputation, and human capital. As LBRY could credibly threaten a number of established companies, it is possible that a large data or media company, such as Amazon, Netflix, Google, would choose to acquire LBRY. In this case, LBRY could be anticipated to bring in the value of its credits outlined in the model above plus a decent premium.

Team

Core Team

Jeremy Kauffman, Chief Executive Officer, Founder

Jeremy knows how to build and scale a startup starting from day one. He knows how to deliver usable products and get those products in front of the right people.

Jeremy is responsible for the packing, presentation, and strategy of LBRY, as well as some design aspects. He is a longtime supporter of decentralized technology and freedom of information.

Jeremy founded TopScore, a startup that processes millions of dollars monthly in event and activity registrations. He also attended Rensselaer Polytechnic Institute, where he received degrees in physics and computer science.

Alex Grintsvayg, Chief Technical Officer, Founder

One of Alex's previous job titles was Wizard, so named because he can seemingly understand and utilize new technologies faster than they can be created.

Alex has been the chief technical lead for products used by millions of people and that has processed tens of millions of dollars. He's also managed and designed scalable infrastructure solutions for SaaS firms, and is leveraging that experience to ensure LBRY's architecture and design is rock-solid.

Alex is one of three dual-degree graduate from RPI on the LBRY team, receiving degrees in Computer Science and Psychology. He is also an alumni of Stuyvesant High School.

Josh Finer, Chief Operations & Growth Officer, Founder

Josh's combination of an MBA, strong analytical skills, programming skills, advertising expertise, and a perceptive insight to financial markets lead him to frequently bear the one of the more contentious titles in the business: growth hacker.

Josh has founded innovative financial companies (later acquired), run millions of dollars in Adwords campaigns, and been an early actor in other crypto projects. Josh's motor and fastest-way-from-A-to-B type of thinking are sure to to LBRY will be as diverse as his background.

Job Evers-Meltzer, VP Engineering

Job was early to discover LBRY and made himself indispensable almost immediately. Job manages the LBRY development calendar, LBRY builds, analytics, an assortment of ad hoc

projects, as well as enforcing engineering standards and best practices.

Job attended MIT, where he obtained a degree in mathematics. Job has experience in quantitative finance, analytical development, and data engineering.

Mike Vine, Marketing, Founder

With a humble BA in Philosophy from Tulane University, Mike has built a successful financial services marketing company, Centinel Consulting. Centinel has helped clients grow from close to nothing to hundreds of thousands of visitors. He manages email marketing lists and social media accounts of the same size.

Mike has been involved with the Bitcoin community since the early days. His friends have launched companies like Lamassu BTM, Coinapult, Shapeshift. Now, he wants a turn to help change the world by harnessing blockchain technology. Mike heads up LBRY's marketing efforts and serves as an ambassador for our platform to media, investors, and the public.|

Jack Robison, Core Developer, Founder

Jack's path to developer with LBRY is fairly typical: face sixty years in prison for innocent chemistry experiments; lose interest in chemistry; program insane electric guitars for Kiss; decide to revolutionize the internet.

Jack was one of the first people to discover LBRY and took to it so fast he may understand more about it than anyone.

Jack has Asperger's Syndrome and is actively involved in the autism community. He was a regular on Wrong Planet's Autism Talk TV, has appeared on National Public Radio, the New York Times, and presents around the country.

Jimmy Kiselak, Core Developer, Founder

Jimmy is the third member of team LBRY to graduate from Rensselaer with multiple degrees. In his case, computer science and physics. After graduation, he found himself mired in government bureaucracy, spending too much time to get too little done.

Jimmy is a Bitcoin fanatic and has been since its early days. He has long been interested in the benefits of decentralization.

Umpei "Kay" Kurokawa, Core Developer

Fill in.

Reilly Smith, Curator

Reilly Smith serves as the in-house Curator and content liaison for LBRY. He has worked in the entertainment industry since 2010, having produced two indie feature films and various short

content. His films have shown at Sundance, SXSW, Dallas IFF, and LA Film Fest and he has produced series for Zero Day Fox and Disney.

Reilly holds a BA in Film and Media Studies from the University of Oklahoma.

Alex Liebowitz, App Developer
Alex is responsible for the LBRY browsing application. An economist turned web developer, Alex joins an assortment of polymaths at LBRY.

Prior to joining LBRY, Alex helped build web and mobile apps for large national corporations. Alex also helps run a large podcasting network and brings knowledge and experience of the publishing industry.

Advisory Team

Alex Tabarrok, Economic Advisor
Alex Tabarrok is Bartley J. Madden Chair in Economics at the Mercatus Center and a professor of economics at George Mason University. He specializes in intellectual property reform, the effectiveness of markets, and the justice system.

Tabarrok is the coauthor, with Mercatus colleague Tyler Cowen, of the popular economics blog Marginal Revolution and cofounder of the online educational platform Marginal Revolution University. He is the coauthor of *Modern Principles of Economics*, and author of the recent book *Launching the Innovation Renaissance*. His articles have appeared in the New York Times, the Washington Post, the Wall Street Journal, and many other prestigious publications.

Tabarrok received his PhD in economics from George Mason University.

Ray Carballada, Media Advisor
Fill this in.

Stephan Kinsella, Legal Advisor
Stephan is a registered patent attorney in Houston and a former partner in the Intellectual Property Practice Group of Duane Morris LLP and General Counsel for Applied Optoelectronics, Inc. He is a Mises Scholar and the founder and director of the Center for the Study of Innovative Freedom. Stephan has published numerous articles and books on IP law and legal topics including *International Investment, Political Risk, and Dispute Resolution: A Practitioner's Guide* (Oxford University Press, 2005) and *Against Intellectual Property* (Mises Institute, 2008).

Stephan received an LL.M. in international business law from King's College London, a JD from the Paul M. Hebert Law Center at LSU, and BSEE and MSEE degrees from LSU. His websites are stephankinsella.com and kinsellalaw.com.

Michael Huemer, Ethical Advisor

Michael Huemer is Professor of Philosophy and Ethics at the University of Colorado, where he has taught since 1998. He has published three single-author scholarly books (including *Ethical Intuitionism*), one edited anthology, and more than fifty academic articles in epistemology, ethics, political philosophy, and metaphysics.

Huemer's articles have appeared in such journals as the *Philosophical Review*, *Mind*, the *Journal of Philosophy*, *Ethics*, and others. His materials are used as readings in classrooms nationwide. He received a B.A. from UC Berkeley and a Ph.D. from Rutgers University.

Objectives

Priority #1: Grow Both Sides of Marketplace

The largest skepticism LBRY has seen so far is in our ability to create a robust two-sided marketplace. We must demonstrate our ability to do this.

- **Recruit 10,000 Publishers.** LBRY has an appealing pitch to millions of content creators. Collect an agreement and publish the content from at least 10,000 creators, largely driven by YouTubers. Create and run a scalable campaign to recruit and onboard these creators.

- **Hit 250,000 Beta Users.** While our focus should be more on the producer side this quarter, residual interest as well as new PR from progress and a Windows release should allow us to reach 250,000.

- **Identify and Influence Sticky Communities.** LBRY's initial traction has come primarily from those interested in cryptocurrency. We must find at least one, and preferably several, communities that can receive a real, immediate benefit from LBRY and make it stick there.

Priority #2: Release Compelling Product

LBRY's beta has been successfully released. It proves that the basic functionality promised by LBRY is both possible and worthwhile.

Now it is time to create something truly remarkable.

- **Provide zero-friction interaction.** Installing and opening an application is a high bar for interacting with LBRY. Create a web-based, embeddable way (and/or single-click way) for people to interact with something on the LBRY network.

- **Expand publisher functionality.** LBRY's beta went live with the absolute minimum proof-of-concept. Now it is time to add the tools publisher's expect, such as publisher pages (channels) and more data on published content.

- **Meet and maintain roadmap.** We recently made our core roadmap public. We must meet the requirements specified there, as well as evolve it through community interactions. A great product comes from thousands of tiny steps towards perfection.

Priority #3: Solidify and Grow Team

As LBRY's develops, its objectives grow and its team needs evolve. There are two particular areas where we need more strength:

- **Add UI/UX Team Member.** The LBRY browser must be as strong as the rest of its data and blockchain layers. We need a team member that is first-class at creating wonderful web applications.

- **Add Growth Staff**. Our success depends on its ability to recruit and retain participants on both sides of the marketplace. LBRY should add at least one, if not two people with a talent for recruiting and retaining creators and consumers in a scalable fashion (likely via targeting campaigns and marketing, but could also be via a talent for PR).

Priority #4: 2017 Financing Preparation

LBRY has some fundraising left to do to prepare for 2017. It should also utilize this relative lull to lay groundwork for the subsequent year.

- **Fill or End Convertible Note.** LBRY still has $150,000 of $600,000 available on its existing convertible note and ought to fill it. However, it would also be unfair to existing investors to leave it open too long. We must push remaining potential investors to make a decision or end the note.

- **Prepare Content Strategy.** As as a result of our push for YouTubers and other growth experiments, we should enter 2017 with a clear roadmap and strategy for how to progress from niche or otherwise outside the mainstream content to the inside the mainstream.

- **Structural Preparation**. Ensure that LBRY is optimally constructed in terms of its legal structure (bylaws and contracts), capitalization table, and legal risk.

Conclusion

This document attempts to do two things: outline the vision and long-term aims of LBRY as well as the short-term, immediate next steps for accomplishing those aims. It is meant to educate you about LBRY as well as serve as a roadmap for you to compare our progress against.

In doing so, our hope is this document has given you a realistic impression of us, an understanding of who we are and what we want to do, and faith in our ability to do it. We welcome your feedback.

Questions?

Contact Jeremy at jeremy@lbry.io.